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# AMENDMENT NO. 1 DECEMBER 1978

# C

# IS: 5412-1969 SPECIFICATION FOR SAWS, NASAL, JOSEPH'S PATTERN

# Alteration

( Page 1, dauxe 6.3) — Substitute the following for the existing clause:
•6.3 Corrosion Resistance — The instrument shall satisfy the boiling and autoclaving test as prescribed in 18:7531-1975 Method for boiling and autoclaving test for corrosion resistance of stainless steel surgical instruments:"

(CPDC 26)

Francel at New Judia Printing Press, Elbura, India



### Indian Standard

## SPECIFICATION FOR SAWS, NASAL, JOSEPH'S PATTERN

- 1. Scope Dimensional and other requirements of nasal saw ( Joseph's pattern ) used in ENT surgery.
- 2. Shape and Dimensions As shown in Fig. 1 and 2.
- 3. Materials

Blade -- Stainless steel, Designation 30Cr13 of Schedule V of 15 · 1570-1961\*.

Handle — Brass, Alloy Grade CuZn30 of IS: 4170-1967† or stainless steel conforming to Designation 04Cr19Ni9 of Schedule V of IS: 1570-1961\*.

- 4. Workmanship and Finish
- 4.1 Blade and handle shall be free from burrs, pics, scale and other defects.
- 4.2 Blade shall be straight, true to shape and size and shall be fixed in the handle by brazing.
- 4.3 Teeth shall be well-cut, sharp, regular in spacing, clean and uniform along the edge.
- 4.4 Blade shall be finished smooth and even except at the teeth.
- 4.5 Blade and stainless steel handles shall be passivated and polished bright.
- 4.6 The brass handle shall be plated chromium over nickel, conforming to Service Grade No. 2 of IS; 4827-1968;.
- 5. Heat Treatment Blade shall be uniformly hardened and tempered to 420 to 480 HY, measured as near to the beth as possible.
- 6. Tests
- 6.1 Saw through a well seasoned teak wood piece, 20 mm square three times. The cutting edge of the saw shall show no sign of damage and the cut through the teak wood piece shall be neat.
- 6.2 Grip the handle in a vice with its axis horizontal and with entire length of blade and shank protruding. Apply force at the tip to deflect it by 3 mm in a plane at right angles to its own plane. Release the force. The saw shall not acquire a new set.
- 6.3 Corrosion Resistance Scrub the sample with soap and warm water, rinse in hot water and then dip in 95 percent ethyl alcohol. Dry the sample. Immerse in copper sulphate solution at room temperature for 6 minutes and wash off with fresh water or wet cotton wool. Make up the solution as follows:

Copper sulphate (  $CuSO_4$ ,  $5H_2O$  ) 4.0 g Sulphuric acid (  $H_2SO_4$  ) ( sp gr 1.84 ) 10.0 g Water (  $H_2O$  ) 90.0 ml

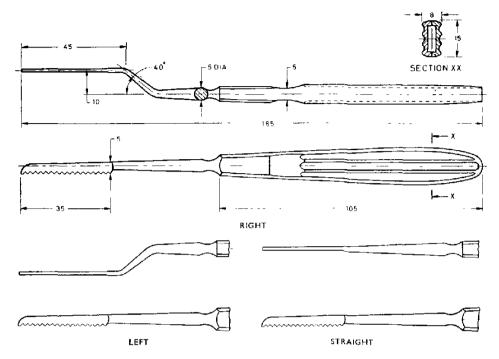
No red stains or spots on the sample shall be allowed but dulling of polished surface may be permitted.

- 7. Marking Mark with the following:
  - a) Manufacturer's name, initials or recognized trade-mark, and
  - b) The words 'stainless steel' on the shank.
- 7.1 ISI Certification Marking Details available from Indian Standards Institution, New Delhi I.
- 8. Packing Wrap individually in wax paper or polyethylene bag and pack in cardboard cartons or as agreed to between the purchaser and the supplier.

*Schedules for wrought steels for general engineering purposes.
†Specification for brass rods for general engineering purposes.
Specification for electroplated coatings of nickel and chromium on copper and copper alloy

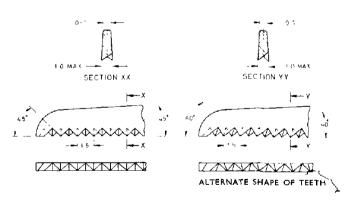
Adopted 26 November 1969

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All dimensions in millimetres.

FIG. I SAW, NASAL, JOSEPH'S PATTERN



All dimensions in millimetres.

FIG. 2 DETAIL OF BLADE